A Study on Knowledge, Attitude and Practice of COVID-19 Pandemic among the Residents

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Abstract

A novel coronavirus disease 2019 (COVID-19) was first discovered in Wuhan, China in December 2019. World Health Organization (WHO) has instantly announced it as a global pandemic since it is a highly infectious respiratory disease that leading to death. Thus, numerous countries have enforced drastic lockdown, movement of control order (MCO), and various preventive measures to mitigate the outbreak of COVID-19. This study aimed to investigate and determine the level of knowledge, attitude, and practices towards COVID-19 among the residents in Taman College Heights and Taman Desa Rhu, Seremban. A validated and standardized questionnaire of this online survey involving 100 residents from both residential areas was conducted between 21st November 2020 until 13th December 2020. The descriptive data analysis of this study shows the finding revealed that the understanding and level of knowledge of respondents from both residential areas regarding COVID-19 was positively high with an overall 99% correct rate. The level of attitude of the respondents was also high with an overall of 96.7%, therefore, directly showing an overall of 98.3% of optimistic and good practices during the COVID-19 pandemic.

Contents

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1 Introduction

Coronavirus disease 2019 or currently known as COVID-19 is an emerging respiratory disease caused by a novel coronavirus that originated from bats (Wang et al., 2020). This respiratory disease was first discovered in December 2019 initiated from the Hunan seafood market in Wuhan, China which had killed more than 1 800 and infected over 70.000 individuals within the first 50 days of an epidemic (Zhong et al., 2020). It is a highly infectious and contagious disease that demonstrates fever, dry cough, shortness of breath, and sore throat as its main symptoms. The outbreak of COVID-19 has raised attention internationally as it is spreading rapidly and globally to more than 100 countries including Europe, Western Pacific, South-East, East Mediterranean, America, Africa, and Asia with approximately 823 626 confirmed cases and 40 598 deaths globally on 1st April 2020 (WHO, 2020).

The daily cases are steady increases, putting Malaysia in 45th place globally on 26th April 2020 with a result of 5 780 confirmed infections, 3 862 recovered, and 98 deaths. Therefore, in response to this serious situation, World Health Organization (WHO) declared it as a public health emergency worldwide on 30th January 2020 and urged for collaborative efforts from all countries to avert the COVID-19 from spreading rapidly (WHO, 2020). The challenge continues with the lack of effective treatments and vaccinations, hence WHO underlines the importance of crucial preventative measures in lowering infection cases and saving lives. The preventative measures or actions have been strictly implemented via collective efforts from all mankind such as hand washing, social distancing, travel limitations, case detection, contact tracing, and quarantine.

The battle against this COVID-19 in Malaysia is expected to last until the end of 2020. On 18th March 2020, Prime Minister, Tan Sri Muhyiddin Yassin has declared Movement Control Order (MCO) in order to curb the transmission rate of the virus and reduce the overburdening of the country's health system by restricting most unimportant activity outside the home unless they are necessary such as buying groceries, working, or seeking medical treatment (Azlan et al., 2020). Malaysia, particularly its the capital city of Negeri Sembilan has been hard impacted by the COVID-19 pandemic with 258 new cases reported, making it record an overall case of 5 458 as of 6th December 2020 (Law et al., 2020). According to Ruzki (2020), the Health Director-General, Tan Sri Dr. Noor Hisham Abdullah said that the COVID-19 occurrences have surged in Negeri Sembilan, particularly in Seremban was due to the active cases in Cluster Cergas that involved a factory in Seremban and Cluster Sofi (maahad tahfiz) where the students were COVID-19 positive as they had displayed symptoms such as losing senses of taste and smell. Therefore, preventive measures have been adopted to prevent infections by abiding with the standard operating procedures (SOP) and quarantine protocols meticulously (Najman et al., 2020; Ningsih et al., 2021).

This research focuses on assisting the COVID-19 management in two residential areas which are Taman College Heights and Taman Desa Rhu located in the Seremban area, the red zone of Negeri Sembilan. There is an urgent need to understand the public awareness of COVID-19 at this critical moment. This implies due to the result that learned from the SARS outbreak in 2002 that indicate knowledge and attitudes towards infectious disease are associated with the level of panic emotion among the population which can further assist to prevent the spread of the virus (Zhong et al., 2020). Hence, the investigation of the KAP towards COVID-19 is working on to get a better understanding of residents' knowledge of the current situation, their attitudes towards the outbreak, and practices of control during this critical situation as their devotion to the control measures is greatly influenced by the KAP itself. Other than that, it is also to provide insight into the potential targeted health education, to indirectly spread awareness about health behaviors during this pandemic as well as to prevent future outbreaks (Phan et al., 2020; Zou et al., 2020).

2 Literature Review

History, symptoms, diagnostic tool, and quarantine period of COVID-19

Coronavirus was supposed to infect only animals until the world witnessed a severe acute respiratory syndrome (SARS) outbreak caused by SARS-CoV, 2002 in Guandong, China (Zhong et al., 2003). After a decade, the emergence of another outbreak that occurred in 2012 of a novel coronavirus in the Middle East shared the same features as the outbreak in 2002. Today, there is another new coronavirus emergence with a highly transmittable and pathogenic viral infection caused by severe acute respiratory coronavirus 2 (SARS-CoV-2) developed at a seafood market, Wuhan, China in December 2019 and actively spreading around the world. SARS-CoV-2 is pathogenetically related to severe acute respiratory syndrome-like bat viruses, thus, bats could be the possible primary reservoir or contributor (Tesser, 1978; Roy et al., 2020).

The initial outbreak has been involved about 66% of the staff there, with at least 41 people reported (Wu et al., 2020). The market was closed on first January 2020 after the announcement of an epidemiology alert by the local health authority on 31st December 2019. However, thousands of people in China including many provinces such as Hubei, Zhejiang, Guangdong, Henan, Hunan, and cities such as Beijing and Shanghai were attacked by the rampant spreading of disease in the following month, in January. At initial, a total of 59 suspected cases with fever and dry cough were transferred to Jin Yin-tan Hospital, and out of 59, 41 patients were confirmed through real-time reverse-transcriptase polymerase chain reaction (RT-PCR) testing. Wu et al. (2020), reported that only 66% of patients had a record of Hunan Seafood Market exposure while the other 34% revealed that they had no recollection of visiting the seafood market, implying that the virus might be spread from person to person (Zhang et al., 2020; Ali et al., 2020).

The transmission was most likely discovered as a result of close contact with and an infected person who had been exposed to coughing, sneezing, respiratory droplets, or aerosols (Adhikari et al., 2020). These aerosols can eventually permeate the human body to the lung via inhalation through the nose or mouth (Phan et al., 2020), leading to the COVID-19 symptoms manifested as fever, dry cough, and exhaustion that is often accompanied by deterioration of smell and taste, which can progress to more serious symptoms such as breathing trouble, chest pain and mortality (WHO, 2020). A study done by Thevarajan et al. (2020), reveals that symptomatic COVID-19 infections usually present a respiratory syndrome, fever, and cough. Fever has been informed in up to 99% of people, 10% of the patients experience diarrhea and less than 5% of COVID-19 patients had symptoms like sore throat, headache, chest discomfort, dizziness, abdominal pain, and nausea. In most patients, the symptoms normally diminish after a week and they normally recuperate at home. Patients with long-term symptoms, on the other hand, are more likely to develop more severe COVID-19 which would be requiring hospitalization, intensive care, and invasive ventilation. Patients with pre-existing conditions such as coronary heart disease, diabetes, hypertension, and Parkinson's disease compromise the majority of those who die in these cases (Adhikari et al., 2020; Kurtieva et al., 2021).

Symptoms might appear from two days to two weeks after being exposed to the virus and can be diagnosed via real-time RT-PCR testing. RT-PCR testing is a highly specific messenger RNA detection that can detect the presence of SARS-CoV-2 in upper (nasopharyngeal swab and nasal swab) and lower respiratory specimens (nasopharyngeal swab, lower respiratory tract aspirates, and bronchoalveolar lavage) collected from individuals suspected of COVID-19 by the healthcare provider (Tang et al., 2020). A positive result with a cycle threshold value (Ct-value) less than 40 indicates that the SARS-CoV-2 RNA is present in the respiratory specimens during infection. Not to mention WHO (2020), stated the quarantine period of COVID-19 takes an average of five to six days, but it can be up to 14 days. This is supported by Adhikari et al. (2020), where he also mentioned that the average quarantine period of COVID-19 is anticipated to be between two to 14 days. Therefore, this gave rise to the established quarantine period that should be placed for 14 days following the last verified case exposure.

History of COVID-19 in Seremban, Negeri Sembilan

In Malaysia, the first case of COVID-19 was detected on 25th January 2020 reported by Zack (2020), involving three Chinese nationals who previously had close contact with an infected person in Singapore who were

quarantined in Sungai Buloh Hospital. The first Malaysian that has been infected by COVID-19 virus reported on 4th February 2020 by Fong (2020), was a 41-year-old man from Selangor where he had traveled to a neighboring country for a conference from 16th January 2020 to 23rd January 2020 with international delegates including some from China. He was also quarantined in Sungai Buloh Hospital, Selangor. Hence, this mark that the virus has reached Malaysia and had attacked millions of people in 14 countries especially in Selangor, Negeri Sembilan, Johor, Malacca, and Sabah (Bao et al., 2020; Li et al., 2020).

Seremban, Negeri Sembilan has been one of the cities that was greatly hit by COVID-19 at the beginning of MCO on 18 March 2020. There is much news reported about the progression of COVID-19 day by day. On 12 March 2020, THE STAR news written by Sarban Singh, reported that four new suspected COVID-19 cases were recorded, with the patients being admitted in isolation wards at Tunku Ja'afar Hospital, Seremban. He also mentioned that one of the infected individuals had recently returned from Vietnam, while the other had recently returned from Iran. When they returned, neither of them had any symptoms, but they soon became unwell. Salim & Zainul (2020), reported that after two weeks of MCO, Dr. Noor Hisham revealed that the number of cases has risen as well as the number of discharged patients. He also revealed that statistics showed two age groups with the highest number of COVID-19 cases are the 26 to 30-year-old group and the 50 to 60-year-old group. In the meantime Awani & Mallow (2020), on 23 March 2020 also testified that the CIMB Group Holdings Bhd's Seremban branch in Jalan Bandar Tunggal had temporarily closed due to two staff tested positive for COVID-19 after safely returned from Indonesia for personal matters and had been undergoing quarantine at home since 19 March 2020 upon their return to Malaysia.

However, the cases of COVID-19 in Seremban kept rising gradually during the MCO phase I period as the positive number of COVID-19 was over 41 cases. Daim (2020), in New Straits Times, stated that Seremban has been officially announced as a red zone on 21 March 2020 when the positive cases were 42. Another news on 30 March 2020 from Harian Metro reported by Mohd Amin Jalil, stressed that Seremban has the highest COVID-19 cases in Negeri Sembilan with so far registered 107 cases of COVID-19 with 50 percent of them involving Ampangan and Senawang. As of 4 April 2020, the positive cases in Seremban have recorded up to 141 and it became the hotspot in Negeri Sembilan Zainul (2020), meanwhile, on 13 April 2020, Seremban has recorded a sharp increase of 41 positive cases bringing the total to 260 cases apart from 219 cases on the previous day (Sulaiman, 2020). Unfortunately, she did not mention the reason behind the steep increase in positive cases.

Without exception, Negeri Sembilan also has become one of the contributors to the death toll of COVID-19. Health ministry director-general, Dr. Noor Hisham Abdullah announced at a press conference on 8 April 2020 that there were two more people died, bringing the total number of deaths to 65 in which one of the two people who died was a 58-year-old Malaysian woman who had been admitted at Tunku Ja'afar Hospital in Seremban with a history of diabetes and hypertension (Tan, 2020). From this case, it is believed that a person infected with COVID-19 and has a background of chronic disease was much likely to die. As it goes on, the number of new cases in Negeri Sembilan continued to grow and on 11 May 2020, it showed 16 new cases. The National Crisis Preparedness and Emergency Response Centre (CPRC) and the Negeri Sembilan Health Department (JKNNS) in their report revealed that the 16 new cases involved eight cases in Seremban and another eight in quarantine stations located in Negeri Sembilan concerning students returning from Indonesia. It is also stated that the number of discharged cases in Negeri Sembilan so far has been 417 while the death toll has been eight cases involving six in Seremban, one in Rembau, and one in Kuala Pilah (Jalil, 2020).

3 Method

The assessment of knowledge, attitude, and practice (KAP) of the COVID-19 pandemic among the residents in Taman College Heights and Taman Desa Rhu, Seremban included several major steps. The preliminary step is the identification of the research design where the sampling plan has been done to determine the location of the selected area that is considered as the red zone in Seremban. Then, the constructed questionnaire is validated by four experts from different professions that supportively and willingly validate the questionnaire. After the pilot study is conducted, the questionnaire is improvised according to the feedback from the appointed experts before proceeded with data collection. The data obtained is used for the statistical analysis

consist of descriptive analysis of the respondents in the study area. This KAP assessment is conducted starting from 21st November 2020 to 13rd December 2020 by conducting an online survey carried out on 100 residents from Taman College Heights and Taman Desa Rhu ranging from children, youth, and adults (Thompson, 2009; Marshall & Jonker, 2010).

Study area

This research was conducted in selected areas which were Taman College Heights and Taman Desa Rhu, Seremban. The locations of the study area were strategically chosen in two distinct places which were Taman College Heights (Figure 1) and Taman Desa Rhu (Figure 2) since they are located in Seremban, a place once contributed to the red zones of COVID-19. These two places were strategically located as they have many facilities such as supermarket (Family Store, Zemart and Giant), night market, mosque, academic institution for instance Sekolah Kebangsaan Sikamat, Sekolah Menegah Kebangsaan Tunku Durah, Sekolah Menegah Sains Tunku Munawir and Sekolah Menegah Kebangsaan Dato' Haji Mohd Redza. Therefore, these were the reason why these residential areas were chosen perhaps some people might be in the large-scale gatherings in one building for example in a supermarket or school without knowing who the carrier of the viruses is.
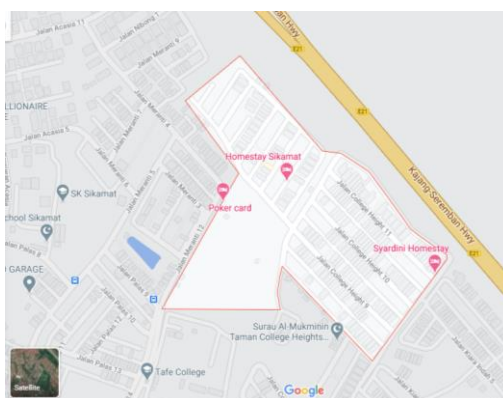

Figure 1. Map of Taman College Heights, Seremban that involved in this research indicates in the blue circle. Image is taken from the Google Map (2020)
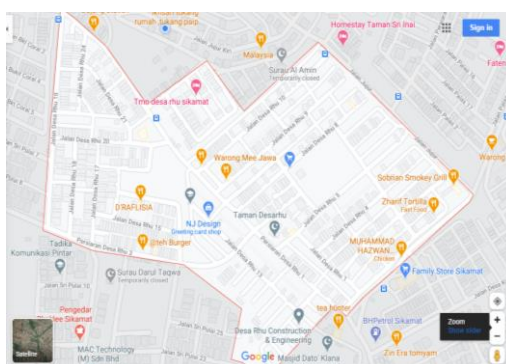

Figure 2. Map of Taman Desa Rhu, Seremban that involved in this research indicates by the red line. Image is taken from Google Map (2020)

The research instrument utilized is a self-administered structured questionnaire that aims to achieve the objectives of this assessment. The validated and standardized questionnaire on KAP was a multiple-choice questionnaire and consisted of four main sections which compromised the demographic characteristics of the respondents and the assessments on the public KAP concerning of COVID-19 pandemic. A total of 24 close-ended questions were constructed for assessing the KAP of the respondents in this study. The knowledge section consisted of 13 close-ended questions, 6 close-ended questions on the attitude section, and 5 close-

ended questions on the practice section. The questions for all sections were assigned or using the parameter "Yes", "No" and "Not sure" where each answer for "Yes" means that the respondents were well-informed or knowledgeable about the COVID-19 pandemic. Apart from that, this questionnaire was offered in English and Malay languages as the main target of respondents were the public which consists of various demographic backgrounds. A uniformity was maintained as all subjects were given the same questions (Abdullah et al., 2020; Kamaludin et al., 2020).

The method of data collection for this study is only through an online platform as the face-to-face encounter was not feasible due to the situation that the rise of COVID-19 cases in the selected area. Therefore, the questionnaire was distributed using "Google Form" link. The respondents can answer the questionnaire by clicking the link given. The respondents who were agreed to participate in the survey will tick the consent form indicating their voluntary participation and willingness to involve in the assessment, eventually proceeded with answering the items in the questionnaire. The respondents were also informed about the confidentiality assurance of the information given for a research purpose. This is supported by the approval from the Kulliyyah of Science.

The data collected from the survey were analyzed using Statistical Package for Social Science (SPSS for Window Version 26). Each question and answer of the survey had been giving the coding before entering the data in SPSS by utilizing 3-point Likert scale. This is because the SPSS only read the number entered and the result of SPSS will come out in the form of graphics and table. Each "Yes" answer will be given 3-point while 2-point for "No" and 1-point for "Not sure". The total mean score of KAP that ≥ 2.80 indicated that the respondents have good KAP of COVID-19 pandemic while the total mean score of KAP below 2.80 was considered that they were having poor knowledge, attitude as well as practice. The descriptive analysis was analyzed by using the percentage and the overall mean score gathered from each question in that section. The statistical significance level was set up at $P < 0.05$. All the differences of estimated variables are considered statistically significant if $P < 0.05$.

4   Results

From a total of 100 respondents that contributed to this study, most of them were female with 58.0% (n=58) while another 42.0% (n=42) were male. For the age group characteristic by years, vast respondents were aged of 7 to 17 and 18 to 24 where both having similar number of respondents with 25.0% (n=25), followed by 25 to 39 with 23.0% (n=23), then 40 to 60 with 22.0% (n=22) and 60 and above with 5.0% (n=5). As for the education background, most respondents were graduated from secondary school with a value of 44.0% (n=44), followed by university, college and primary school with a value of 28.0% (n=28), 18.0% (n=18) and 10.0% (n=10) respectively.

Next, for the employment status, it showed 44.0% (n=44) of the respondents were students, 29.0% (n=29) were government employees, 13.0 % (n=13) were working in private sectors, 6.0% (n=6) were unemployed and both self-employed and retired were accounted the same frequency with a value of 4.0% (n=4) respectively. As for the household monthly income, the majority of the respondents were on the category earning between RM3001-RM5000 per month having a value of 29.0% (n=29), followed by the category of respondents both earning below RM1500 and between RM1501-RM3000 representing 24.0% (n=24) and the category of respondents earning for RM5001-RM8000 representing 14.0% (n=14), 6.0% (n=6) for respondents earning above RM10001 and 3.0% (n=3) for respondents earning RM8001-RM10000. From this final result, it can be seen that most respondents were single with a value of 59.0% (n=59) and married with a value of 41.0% (n=41). There were no divorced cases reported in this study. Last but not least, this study was having an equal number of residents from both residential areas.

Three sections of the descriptive analysis were specified into KAP related during the COVID-19 crisis. The items for each section of the questionnaire were designated with code and presented in relative frequency, percentage, and mean score of each item. The degree of knowledge on COVID-19 was evaluated based on the overall value of the mean score that has been made by the respondents. Respondents who were answering each statement with "Yes" indicated that they have good knowledge, while those who answer "No" or "Not sure" where indicated that they were having poor or lack of knowledge on the matter of COVID-19 pandemic.

Table 1 showed the statement for the knowledge part coding as K01 until K13 concerning the familiarity (K01), hygiene (K02), symptoms (K03 & K04), factors on how the virus is transmitted (K05, K06, & K07), treatment (K08), prevention measures (K10 & K11), isolation of COVID-19 patient (K12) and the result that indicates the presence of coronavirus (K13). Most respondents answered correctly for almost every item in the knowledge section with an overall mean score of 2.97, suggesting an overall 99.0% (2.97/3.00*100). The items that demonstrated the highest number of respondents answered correctly were items K01, K02, K04, K08, K10, and K12 which has a value of 100.0% (n=100) with a mean score of 3.00. This proved that majority of the respondents knew and were knowledgeable about COVID-19. The respondents were well-informed especially on items K10 and K11 as reported by Povera & Basyir (2020), that The Health Director-General Datuk Seri Dr. Noor Hisham Abdullah has declared that the transmission of this virus can be infected by direct contact and unprotected exposure to the infected person. Hence, concerning that, the government authorities have instructed to follow national response strategies such as practicing social distancing, promotion of health measures including handwashing, respiratory etiquette, cancellation of large-scale public gatherings, and endorsed to stay at home (Bedford et al., 2020). Next, it can be seen that respondents were answering "no" and "not sure" for statements K03, K05, K06, K07, K09, K11, and K13 which indicates that some people have low information on that topic given or are not aware of the current matters. For instance, about eight respondents were answering "not sure" and one answering "no" for the statement K13 where respondents were asked about the result of the swab test which indicates the presence of the coronavirus. This presented that there were still some people having poor and deficient knowledge about COVID-19.

Table 1
Knowledge of the respondents regarding the COVID-19 pandemic

Item	Frequency n (%)			Mean
	Y	N	NS	
K01	100 (100.0)	0 (0)	0 (0)	3.00
K02	100 (100.0)	0 (0)	0 (0)	3.00
K03	99 (99.0)	1 (1.0)	0 (0)	2.99
K04	100 (100.0)	0 (0)	0 (0)	3.00
K05	99 (99.0)	0 (0)	1 (1.0)	2.98
K06	97 (97.0)	0(0)	3 (3.0)	2.94
K07	97 (97.0)	0 (0)	3 (3.0)	2.94
K08	100 (100.0)	0 (0)	0 (0)	3.00
K09	95 (95.0)	3 (3.0)	2 (2.0)	2.93
K10	100 (100.0)	0 (0)	0 (0)	3.00
K11	99 (99.0)	1 (1.0)	0 (0)	2.99
K12	100 (100.0)	0 (0)	0 (0)	3.00
K13	91 (91.0)	1 (1.0)	8 (8.0)	2.83
Overall mean score				2.97

Y: Yes (3), N: No (2), NS: Not Sure (1)

Table 2 summarized the attitude of the respondents in Taman College Heights and Taman Desa Rhu, Seremban was positive with an overall mean score of 2.90, suggesting an overall of 96.7% (2.90/3.00*100) correct rate on this attitude test. The close-ended questions for the attitude part were coding as A01 until A06 concerning the confidence that Malaysia can win the battle against COVID-19 (A01), optimisms (A02), willingness to give up their daily activities (A03), adapted to the new norms (A04), reminding people about current cases (A05), and behavioral of people to COVID-19 patients (A06). Based on the result acquired, it revealed that most of the respondents have positive attitudes for items A02 and A04 with a mean score of 2.98. The majority of the respondents feel optimistic that Malaysia can win the battle against COVID-19 even though everyone is feeling a little bit afraid. Besides, most respondents showed that they already adapted well to the new norms such as wearing personal single-used products such as face masks when going to the public, practicing social distancing, and frequently washing hands with soap and water or hand sanitizer. For item A03, it revealed the lowest mean score with a value of 2.58 where 37.0% (n=37) of the respondents did not

willingly give up daily activities in order to stop the spreading of virus. Supposedly, in this critical situation, people must reduce their movement and interaction with other people because if they still doing their daily activities, as usual, it was afraid that they might have interacted with a carrier of COVID-19. Therefore, this would indirectly increase the risk of getting infected with COVID-19 to ourselves as well as the others.

Next, item A01 disclosed that vast respondents held an optimistic attitude towards the COVID-19 pandemic where 96.0% (n=96) believed that COVID-19 will be successfully controlled with a mean of 2.92. According to Zhong et al. (2020), during the SARS epidemic, 88.9% of the Chinese residents believed that SARS can be successfully controlled and 100% had confidence that China can win the battle against SARS. This finding on Chinese people's faith in their ability to triumph in combat was similar to this current scenario. Therefore, the optimistic attitude of the Malaysians was crucial, and it was linked to the government's effort in initiating MCO during this pandemic which enhanced people's confidence in winning the battle against the virus. Not to mention, items A05 and A06 were having the same mean score of 2.96 where 98.0% (n=98) of the respondents were keeping a good attitude by reminding others about the current case number of COVID-19 as it could help people aware of how worst the situation had been from day by day. This study also showed that most people were giving a positive stigma, being supportive, and not insulted or isolated the COVID-19 patients. This positive and supportive vibe is a must in society so that the COVID-19 patients feel more enthusiastic to fight the disease. Therefore, society indeed plays a vital role in reducing or slowing down the spreading of the COVID-19 virus.

Table 2
The attitude of the respondents towards COVID-19 pandemic

Item	Frequency n (%)			Mean
	Y	N	NS	
A01	96 (96.0)	0 (0)	4 (4.0)	2.92
A02	99 (99.0)	0 (0)	1 (1.0)	2.98
A03	63 (63.0)	32 (32.0)	5 (5.0)	2.58
A04	99 (99.0)	0 (0)	1 (1.0)	2.98
A05	98 (98.0)	0 (0)	2 (2.0)	2.96
A06	98 (98.0)	0(0)	2 (2.0)	2.96
Overall mean score				2.90

Y: Yes (3), N: No (2), NS: Not Sure (1)

Table 3 presented the descriptive data for each item in the attitude section and the level of attitude towards the COVID-19 pandemic was positive with an overall mean score of 2.95, suggesting an overall 98.3% (2.95/3.00*100) correct rate on this practice test. The close-ended questions for the practice part were coding as P01 until P05 concerning the prevention measure (P01, P03, P04, & P05) and quarantine (P02). The highest mean score was on item P01 with a mean score of 3.00, while the lowest mean score was 2.86 on item P05. This signified that most respondents properly managed to practice the prevention measured given by the MOH (P01) but were not willing to pay attention to educate people around the current cases of COVID-19 per day (P05). As for item P02, 98.0% (n=98) of the respondents were practicing and maintaining quarantine with their family during the MCO period, whereas 2.0% (n=2) of the respondents were found it hard to comply or obey the law made by the government. Next, from the previous test of attitude, the respondents were likely to show a good attitude, thus, most respondents adopted precautions measures to avoid acquiring COVID-19 such as staying at home, maintaining social distancing, and wearing personal protective equipment as stated in the items P03 and P04 with a mean score of 2.92 and 2.98 respectively. In addition, the good result of the items P01 and P04 were realistically due to the Prime Minister's speech where he stated and decided to implement a Nationwide Restriction of Movement Order beginning 18th March 2020. The Order is enforced under the Control and Prevention of Infectious Diseases Act 1988 and the Police Act 1967 that emphasize the complete restriction of movement and assembly nationwide, a complete travel restriction for all Malaysians going overseas, closure of all kindergartens, public and private schools, universities, adopting practicing social distancing at least 1 meter apart and wearing personal protective equipment when going outside. Plus, he also said that the government has already seen several other countries such as China taking similar drastic

measures and they have seen a remarkable reduction in the number of infections of COVID-19 (Prime minister, 2020).

Table 3
The practice of the respondents during COVID-19 pandemic

Item	Frequency n (%)			Mean
	Y	N	NS	
P01	100 (100.0)	0 (0)	0 (0)	3.00
P02	98 (98.0)	1 (1.0)	1 (1.0)	2.97
P03	92 (92.0)	8 (8.0)	0 (0)	2.92
P04	99 (99.0)	0 (0)	1 (1.0)	2.98
P05	88 (88.0)	10 (10.0)	2 (2.0)	2.86
Overall mean score				2.95

Y: Yes (3), N: No (2), NS: Not Sure (1)

5 Conclusion

In conclusion, this study was successfully carried out to evaluate the level of COVID-19 KAP among 100 respondents in Taman College Heights and Taman Desa Rhu, Seremban. This study revealed that residents from both residential areas have good knowledge, attitude, and practice as the total mean score of each section was high with a value of 2.97, 2.90, and 2.95 respectively. All mean scores were nearest to 3.00 which indicated that they have a very good level of knowledge, attitude, and practice during this crisis time and situation. This finding signifies the importance of improving the residents' knowledge on COVID-19 via health education programs which may also result in improving their attitudes and encouraging them to maintain safe practices during COVID-19.

Following the findings of this study, the current survey exposes the need for more comprehensive education programs about COVID-19 which emphasize the consistency of self-protection and prevention measures as well as the responsibility of each individual to protect their loved one from this highly infectious virus. These education programs aimed at improving the COVID-19 knowledge help encourage an optimistic attitude and practice prevention measures such as wearing face masks, hand sanitizer, and maintaining social distancing into daily habits. Apart from that, through this study, it is believed that the attitude of Malaysians can be enhanced and improved with the help of the Malaysian government and related authorities as it is the lowest among those three sections. Malaysia government and related authorities should take a proactive approach on updating the current information about COVID-19 and scattering misinformation in the form of conflicting opinions, false and incorrect information to the society so that they are aware and understand the current pandemic situation which indirectly builds a strong spirit to fight against this pandemic. Therefore, with the collaboration of the Malaysian government and Malaysians, Malaysia surely will win the battle against the COVID-19 shortly.
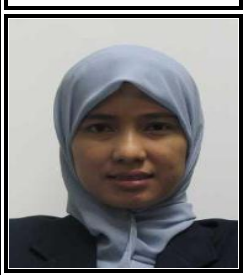
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